REMARKS

Except as discussed in detail below, Applicants are amending the claims to correct informalities therein and to clarify the claimed invention. These amendments are not in response to a patentability rejection.

Applicants will now address each of the Examiner's objections and rejections in the order in which they appear in the Office Action.

Specification and Abstract

In the Office Action, the Examiner objects to the abstract of the disclosure for informalities therein. Accordingly, Applicants are amending the abstract to correct the informalities and to provide the proper content, format and language for the abstract, as requested by the Examiner. No new matter has been added. Therefore, it is respectfully requested that this objection be withdrawn.

The Examiner also objects to the specification for informalities therein. In particular, in the brief description of the drawings, the Examiner is requesting that parts a, b, etc. of Figs. 6, 7, 8, 15, 16 be referenced. Applicants are amending the specification accordingly.

The Examiner also objects to the term "semimetal" since the term is used not only to refer to specific metals but also to state the properties of materials. Applicants are amending the specification at page 30, line 8 and page 32, lines 3-8 to change "semimetals" to "metalloids." Metalloid means those materials whose properties are intermediate between those of metals and those of nonmetals, and is also known as semi-metal (McGraw-Hill Dictionary of Scientific and Technical Terms Fifth Edition; Sybil P. Parker Editor in Chief; McGraw-Hill, Inc.: New York, U.S.A., 1994.) It is known that, in the Periodic Table, the straight line passing boron (B) and

astatine (At) is the boundary between metals and nonmetals, and that those elements which are located close to this line belong to the category of metalloid. Accordingly, it is respectfully submitted that the metals exemplified as a "semi-metal" (now "metalloid") in the specification are properly selected and that no further revision of specification on this matter is necessary.

Applicants note that the Examiner speculated that it may be unclear as to what elements are considered as metals for the inventive metal oxide in the pending claims. Furthermore, as the Examiner indicated, training of the skilled artisan might influence the decision whether an elements belongs to a metal or metalloid. Thus, in order to clearly claim and clarify the invention, Applicants are amending independent claim 1 to state that the metal atom is selected from typical metals or transition metals. It is respectfully submitted that this classification of metals is traditionally very clear and would be clear to one skilled in the art. Further, this language is clearly supported by the specification (see e.g. page 27, lines 3-4; page 29, line 31 to page 30, line 1).

Applicants are amending the specification with each of these corrections, plus a couple of other minor, formal corrections. No new matter has been added. Therefore, it is respectfully requested that these objections be withdrawn.

Applicants have prepared and enclose a substitute specification and marked-up copy of the specification with each of the amendments made to the specification and abstract. As no new matter has been added, it is respectfully requested that this amendment be entered and allowed, and the objections withdrawn.

Drawings

The Examiner also objects to the drawings as including Japanese characters. Applicants initially note that while the drawings as filed included Japanese characters, the verified English translation filed on August 9, 2004 did not include Japanese characters in the drawings, except in Fig. 16. Accordingly, Applicants are amending Fig. 16 to remove these characters. Applicants are also amending Figs. 6, 7, 8, 9, 10, 15 and 16 to correct informalities therein. Formal drawings are also being submitted. No new matter has been added. Therefore, it is respectfully requested that these amended drawings be entered and allowed, and this objection withdrawn.

Claim Objections - 37 CFR 1.75(c)

The Examiner also objects to Claims 18 and 19 under 37 C.F.R. 1.75(c) as being in improper dependent form for failing to further limit the subject matter of the previous claim. This rejection is respectfully traversed.

While Applicants traverse this rejection, in order to advance the prosecution of this application, Applicants are canceling these claims, without prejudice or disclaimer, rendering this rejection moot. Accordingly, it is respectfully requested that this rejection be withdrawn.

Claim Rejections - 35 USC §112

§112, First Paragraph

The Examiner also rejects Claim 16 under 35 USC §112, first paragraph, as failing to comply with the written description requirement. In particular, the Examiner states that the specification does not teach a material further including an aromatic moiety. This rejection is also respectfully traversed.

While Applicants traverse this rejection, in order to advance the prosecution of this application, Applicants are amending Claim 16 to change the term "aromatic moiety" to "aromatic compound." This term is clearly supported by the specification (see e.g. page 8, lines 13-15). Therefore, it is respectfully submitted that this rejection has been overcome, and it is requested that the rejection be withdrawn.

§112, Second Paragraph

The Examiner also rejects Claims 1 and 5-19 under 35 U.S.C. §112, second paragraph, as being indefinite. This rejection is also respectfully traversed.

More specifically, Claim 17 has been rejected for an alleged insufficient antecedent basis for the term "aromatic compound." Claim 17 is dependent on Claim 16. As explained above, Claim 16 has been amended to recite "an aromatic compound." This will provide the requested antecedent basis for the objected to term in Claim 17 and overcome this objection

The Examiner also rejects Claims 1, 5-13 and 16-19 and contends that it is unclear as to what elements are considered as "metals." As mentioned above, independent Claim 1 has been amended to clarify the meaning of the metal atom and metals. It is respectfully submitted that this overcomes this objection.

Accordingly, it is respectfully requested that this rejection be withdrawn.

Claim Rejections - 35 USC §102

The Examiner also rejects Claims 1, 5, 6, 13-16, 18 and 19 under 35 USC §102(b) as being anticipated by Hironaka et al. (US 5,466,392). This rejection is also respectfully traversed.

More specifically, the Examiner contends that <u>Hironaka</u> "teaches a material having aluminum oxide chelated to 8-hydroxyquinoline and containing an aromatic or a silica moiety" and that the "reference teaches the claimed material." Applicants respectfully disagree.

Independent Claim 1 recites an organic-inorganic hybrid material comprising a metal oxide matrix. Metal oxide matrix means the three-dimensional network of a metal oxide which contains repeated metal-oxygen bonds. Representative examples are silica gel and aluminum oxide which possess the three-dimensionally crosslinked metal-oxygen bonds. Such a structure is schematically illustrated in Figure 1 of the present application.

In contrast, <u>Hironaka</u> discloses *molecules* expressed by the general formula (I) in <u>Hironaka</u>. While these molecules contain a metal-oxygen bond, they do not contain any three-dimensionally crosslinked or networked structure constructed by the repeated metal-oxygen bond. Hence, <u>Hironaka</u> does not disclose or suggest a *metal oxide matrix*, as recited in independent Claim 1.

Therefore, independent Claim 1 is not disclosed or suggested by <u>Hironaka</u>, and Claim 1 and those claims dependent thereon are patentable over <u>Hironaka</u>. Accordingly, it is respectfully requested that this rejection be withdrawn.

Information Disclosure Statement

Applicants are submitting an information disclosure statement (IDS) herewith. It is respectfully requested that this IDS be entered and considered prior to the issuance of any further action on this application.

Conclusion

It is respectfully submitted that the present application is in a condition for allowance and should be allowed.

If any fee should be due for this amendment, please charge our deposit account 50/1039.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

Date: May 23, 2007

Mark J. Murphy

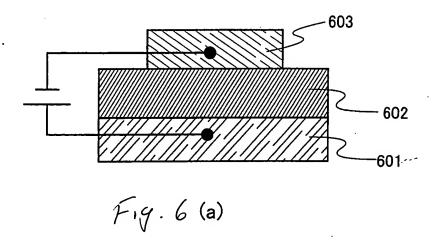
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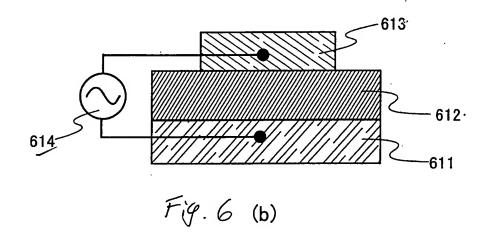
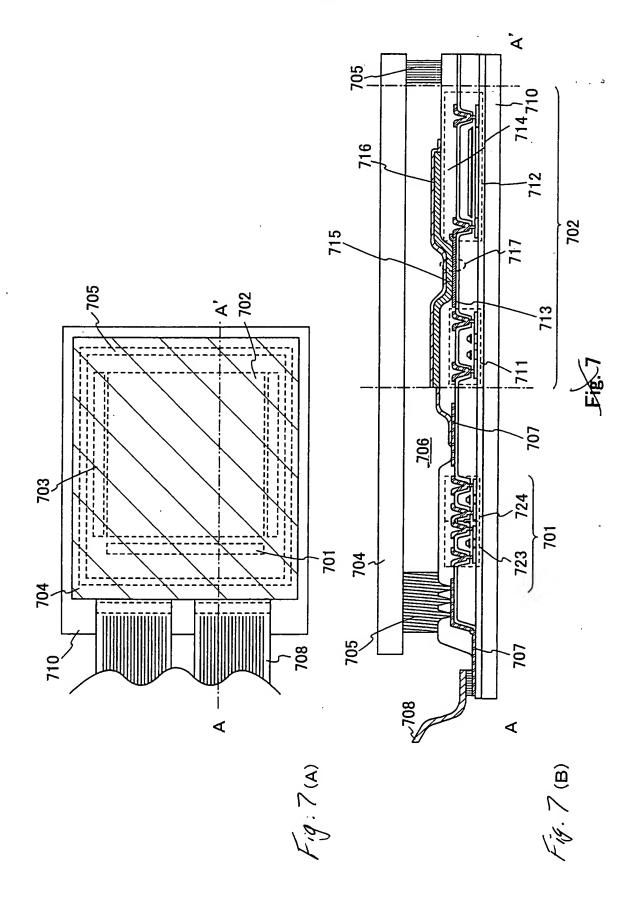
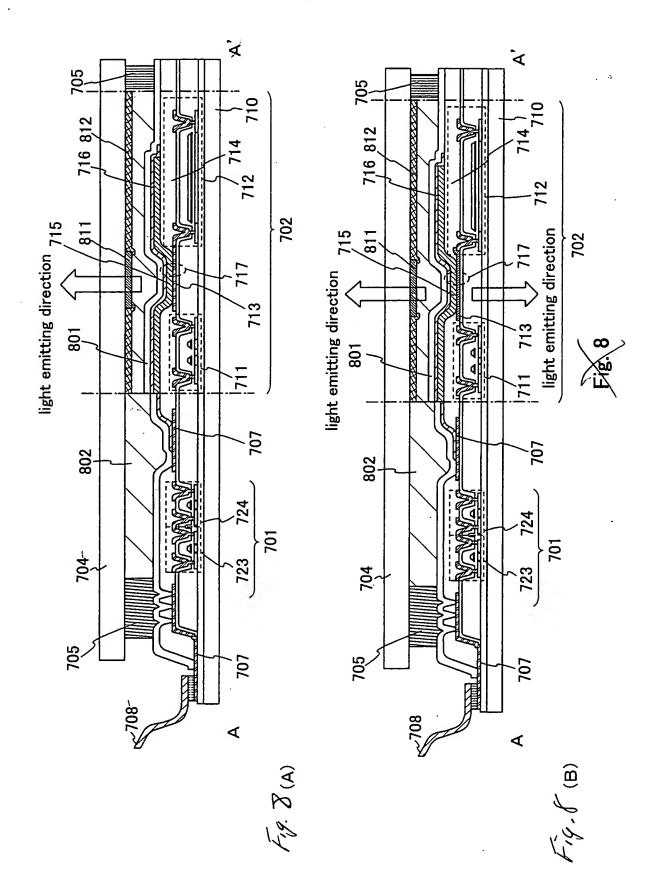


Fig. 6





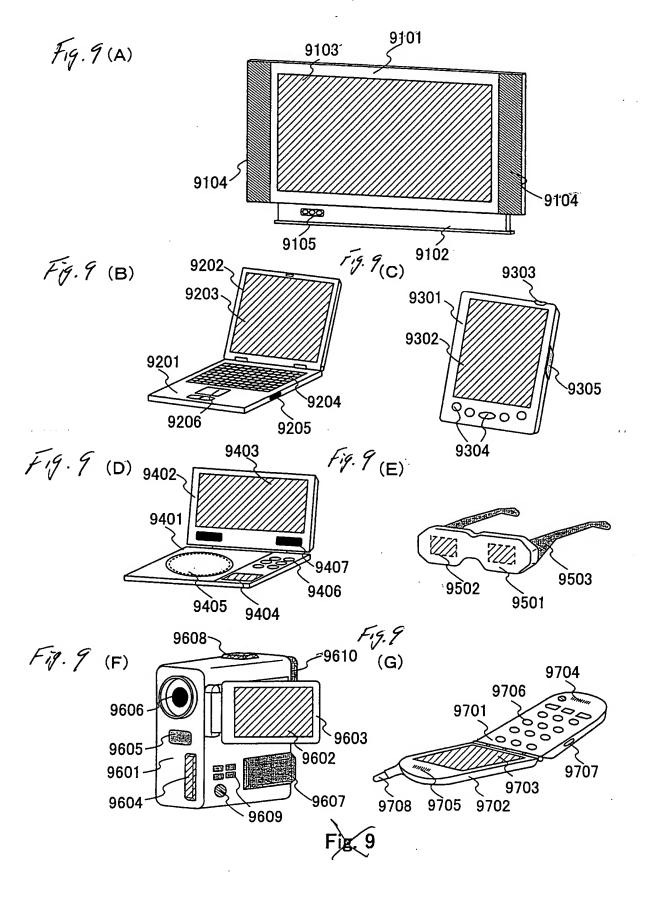


Fig. D(a)

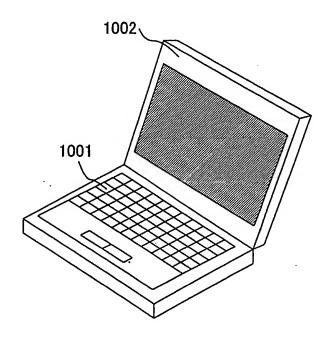
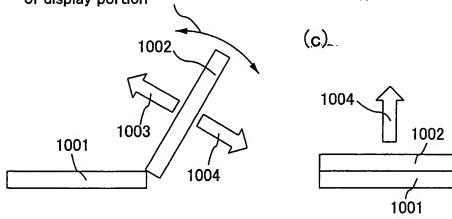
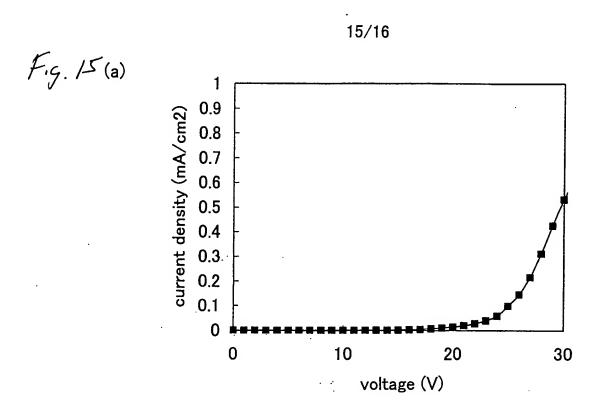
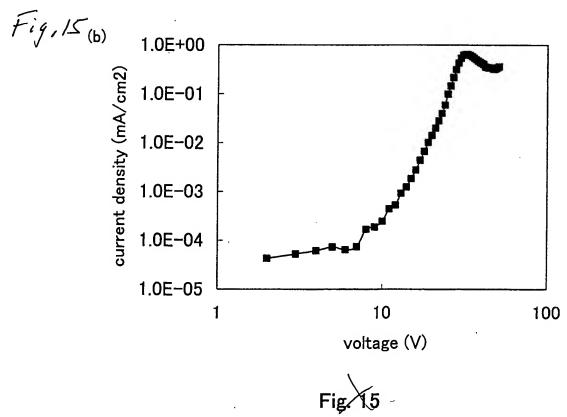


Fig. 10 (b)

opening and closing direction of display portion





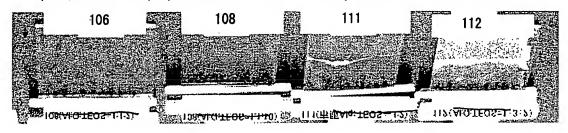


Annotated Sheet

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A. B. C. D.

Fig. 16